REMARKS

The foregoing Preliminary Amendment is requested in order to delete the multiple dependent claims and avoid paying the multiple dependent claims fee.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**VERSION WITH MARKINGS TO SHOW CHANGES MADE.**"

Early action on the merits is respectfully requested.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

3. (amended) Microcellular polyhipe polymer scaffold according to Claim 1 [or 2] suitable for growth of living matter selected from cells, micro-organisms such as bacteria and virus and mixtures thereof.

4. (amended) Microcellular polyhipe polymer scaffold as claimed in Claim 1 [any of Claims 1 to 3] comprising micro channels formed of pores with interconnects suitable for providing communication and penetration of living matter for anisotropic (directional) growth thereof.

5. (amended) Microcellular polyhipe polymer scaffold as claimed in Claim 1 [any of Claims 1 to 4] wherein the walls of the micro-channels are (bio)degradable suitable for fusion of living matter in the (bio)degraded scaffold.

6. (amended) Microcellular polyhipe polymer scaffold as claimed in Claim 1 [any of Claims 1 to 5] comprising in individual zones, pore and interconnect sizes in different ranges, suitable for co-culturing two or more types of living matter.

7. (amended) Microcellular polyhipe polymer scaffold as claimed in Claim 1 [any of Claims 1 to 6] wherein ratio of interconnect to pore diameter is in the range $0 < d/D < 0.5$, preferably in the range $0.1 < d/D < 0.5$ when the pore diameter is approximately less than 200 micron

9. (amended) Microcellular polyhipe polymer scaffold as claimed in Claim_7 [any of Claims 7 and 8] wherein the interface between a microcapillary wall and the bulk polymer provides a thin surface layer of the order of 0.5-5 micron, forming a zone particularly suited for directional (anisotropic) growth of living matter.

10. (amended) Microcellular polyhipe polymer scaffold as claimed in Claim 9 [as dependent on Claim 3] wherein the interface has smaller pore size than the bulk polymer wherein the zone is suitable for growth of cells forming a lining, for example cells lining the blood vessels or for growing endothelial cells on the interface surface.

11. (amended) Microcellular polyhipe polymer scaffold as claimed in Claim_1 [any of Claims 1 to 10] comprising a module of shell and tube type or cubic/polyhedric type with respect to direction and/or configuration of channels and/or microcapillaries.

12. (amended) Microcellular polyhipe polymer scaffold as claimed in Claim_1 [any of Claims 1 to 11] comprising a surface coating, using coating materials introduced in situ during polymerisation or post polymerisation

13. (amended) Microcellular polyhipe polymer scaffold as claimed in Claim_1 [any of Claims 1 to 12] wherein polymer is selected from proteins and cellulose, polyacrylamide, polyvinyl in rigid or flexible form, poly(lactic acid), poly(glycolic acid), polycaprolactone, poly (lactide/glycolide) and polyacrylimide.

14. (amended) Microcellular polyhipe polymer scaffold as claimed in Claim_1 [any of Claims 1 to 13] wherein polymer comprises

resiliently deformable or elastic material or is rendered resiliently deformable or elastic and is suitable for repeated stress and relaxation by means of oscillatory straining of the scaffold during cell growth facilitating rate of cell growth.

15. (amended) Microcellular polyhipe polymer scaffold as claimed in Claim 1 [any of Claims 1 to 14] wherein polyhipe scaffold is electrically conductive or is rendered electrically conductive whereby it is suitable for conducting an electric current during cell growth, facilitating distinguishing certain cell types and promoting growth and fusion of particular cell types

18. (amended) Process as claimed in Claim 16 [Claims 16 or 17] comprising co-extrusion of polyhipe emulsions of differing pore and interconnect sizes eg concentrically or side-by-side.

19. (amended) Process as claimed in Claim 16 [Claims 16 to 18] wherein the emulsion comprises aqueous and non-aqueous phases, preferably aqueous and oil.

20. (amended) A biologically active system comprising a polyhipe scaffold as defined in Claim 1 [any of Claims 1 to 15] and living matter providing normal cell functioning associated with a natural biologically active system present in the human or animal body, wherein living matter is selected from microorganisms or multiple cells selected from human, animal and plant cells, preferably selected from isotropic tissue and bone cells present in cartillage, cornea, marrow and the like, anisotropic cells such as nerve, muscle, blood vessel cells, of cell type selected from fibroblasts, chrondocytes, osteoblasts, bone marrow cells, hepatocytes, cardiomycytes neurons, myoblasts, macrophages and microvascular endothelium cells.

21. (amended) Method for growth of multiple cells in a polyhipe scaffold as hereinbefore defined in Claim_1 [any of Claims 1 to 15] comprising providing cells on or in the scaffold in a controlled environment and providing a suitable nutrient adapted for growth and providing conditions for growth promotion and positional control.

23. (amended) An organ support module comprising a cubic or polyhedric module of closely interwoven but not interconnecting channels immersed in a polyhipe scaffold as defined in Claim_3 [any of Claims 3 to 15] suited for growth of specific organ cells in the polyhipe and/or the channels, wherein cells are optionally in contact with a specific microchannel and all cells are capable of intercell communication.

25. (amended) The use of a polyhipe scaffold, a biologically active system, or organ support module as defined in Claim_1 [any of Claims 1 to 15, 20 and 23] for the manufacture of contact lenses, dental fillings, cochlea implants, vascular supports including heart valves and cardiac pace makers and drug delivery skin patches.